

XX The reported activity, e.g., asthma therapeutic activity.

XX Sequence: 14 AA:

Query Match: 88.0% Score 67; DB 14; Length 14;
 Best Local Similarity: 100.0%; Prod. No. 2,500,000;
 Matches: 14; Mismatches: 0; Mismatches: 0; Gaps: 0;

XX 2 VAAVKAALVLE 14
 XX 1 1 1 1 1 1 1 1 1 1 1 1 1 1
 XX 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RESULT 4

AAW40979 standard: peptide: 14 AA:

XX AAW40979:

XX 09-APR-1998 (first entry)

XX Cysteine peptide of major cat allergen Fel d1

XX Major cat allergen Fel d1; chain 1; cysteine peptide; 14-ell; asthma;
 XX allergic allergy therapy.

XX Fel d1 SP:

XX W0974519-A1:

XX 25-SEP-1997:

XX 20-MAR-1997: 97W (GBOU783)

XX 24-APR-1998: 96GR (GBOU450)

XX 21-MAR-1998: 96GR (GBOU504)

XX (UNCL) IMPERIAL COLLEGE S11 TECHNOLOGY & MED.

XX Key AB: Larche M:

XX W01: 1997 40054/44:

XX Determined if peptide of protein is cysteine peptide - by comparison
 XX its reactivity with pre-challenged and non-pre-challenged T cells;
 XX useful to diagnose or treat allergic condition, e.g., asthma

XX Claim 1: 14 AA: 49PP: English.

XX This sequence represents a cysteine peptide of the major cat allergen
 XX Fel d1. This sequence can be used in the method of the invention. The
 XX method of the invention is for determining if a peptide of a protein is a
 XX cysteine peptide, and comprises: (a) exposing T cells to the peptide in a
 XX primary challenge, and measuring the reactivity of the T cells to the
 XX peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
 XX peptide, to the peptide in a secondary challenge, and measuring the
 XX reactivity of the pre-challenged T cells to the peptide; and
 XX (c) determining the peptide to be a cysteine peptide if the reactivity
 XX is observed in the secondary challenge, but not in the primary challenge.
 XX The method as tested cysteine can be used to diagnose or treat an allergic
 XX allergy, e.g., asthma. They can also be used in the screen compounds for
 XX therapeutic activity, e.g., asthma therapeutic activity.

XX Sequence: 14 AA:

Query Match: 87.0% Score 67; DB 18; Length 14;
 Best Local Similarity: 100.0%; Prod. No. 4,900,06;
 Matches: 14; Conservative: 0; Mismatches: 0; Indels: 0; Gaps: 0;

XX 1 VAAVKAALVLE 14
 XX 1 1 1 1 1 1 1 1 1 1 1 1 1 1

XX 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RESULT 5

AAW40981 standard: peptide: 14 AA:

XX AAW40981:

XX 09-APR-1998 (first entry)

XX Cysteine peptide of major cat allergen Fel d1

XX Major cat allergen Fel d1; chain 1; cysteine peptide; 14-ell; asthma;
 XX allergic allergy therapy.

XX Fel d1 SP:

XX W0974519-A1:

XX 25-SEP-1997:

XX 20-MAR-1997: 97W (GBOU783)

XX 24-APR-1998: 96GR (GBOU450)

XX 21-MAR-1998: 96GR (GBOU504)

XX (UNCL) IMPERIAL COLLEGE S11 TECHNOLOGY & MED.

XX Key AB: Larche M:

XX W01: 1997 40054/44:

XX Determined if peptide of protein is cysteine peptide - by comparison
 XX its reactivity with pre-challenged and non-pre-challenged T cells;
 XX useful to diagnose or treat allergic condition

XX Claim 1: 14 AA: 49PP: English.

XX This sequence represents a cysteine peptide of the major cat allergen
 XX Fel d1. This sequence can be used in the method of the invention. The
 XX method of the invention is for determining if a peptide of a protein is a
 XX cysteine peptide, and comprises: (a) exposing T cells to the peptide in a
 XX primary challenge, and measuring the reactivity of the T cells to the
 XX peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
 XX peptide, to the peptide in a secondary challenge, and measuring the
 XX reactivity of the pre-challenged T cells to the peptide; and
 XX (c) determining the peptide to be a cysteine peptide if the reactivity
 XX is observed in the secondary challenge, but not in the primary challenge.
 XX The method as tested cysteine can be used to diagnose or treat an allergic
 XX allergy, e.g., asthma. They can also be used in the screen compounds for
 XX therapeutic activity, e.g., asthma therapeutic activity.

XX Sequence: 14 AA:

Query Match: 87.0% Score 67;
 Best Local Similarity: 100.0%; Prod. No. 4,900,06;
 Matches: 14; Conservative: 0; Mismatches: 0; Indels: 0; Gaps: 0;

XX 1 VAAVKAALVLE 14
 XX 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RESULT 6

AAW40981 standard: peptide: 14 AA:

XX AAW40981:

XX 09-APR-1998 (first entry)

XX Cysteine peptide of major cat allergen Fel d1

XX Major cat allergen Fel d1; chain 1; cysteine peptide; 14-ell; asthma;
 XX allergic allergy therapy.

XX Fel d1 SP:

XX W0974519-A1:

XX 25-SEP-1997:

XX 20-MAR-1997: 97W (GBOU783)

XX 24-APR-1998: 96GR (GBOU450)

XX 21-MAR-1998: 96GR (GBOU504)

XX (UNCL) IMPERIAL COLLEGE S11 TECHNOLOGY & MED.

XX Key AB: Larche M:

XX W01: 1997 40054/44:

XX Determined if peptide of protein is cysteine peptide - by comparison
 XX its reactivity with pre-challenged and non-pre-challenged T cells;
 XX useful to diagnose or treat allergic condition

XX Claim 1: 14 AA: 49PP: English.

XX This sequence represents a cysteine peptide of the major cat allergen
 XX Fel d1. This sequence can be used in the method of the invention. The
 XX method of the invention is for determining if a peptide of a protein is a
 XX cysteine peptide, and comprises: (a) exposing T cells to the peptide in a
 XX primary challenge, and measuring the reactivity of the T cells to the
 XX peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
 XX peptide, to the peptide in a secondary challenge, and measuring the
 XX reactivity of the pre-challenged T cells to the peptide; and
 XX (c) determining the peptide to be a cysteine peptide if the reactivity
 XX is observed in the secondary challenge, but not in the primary challenge.
 XX The method as tested cysteine can be used to diagnose or treat an allergic
 XX allergy, e.g., asthma. They can also be used in the screen compounds for
 XX therapeutic activity, e.g., asthma therapeutic activity.

XX Sequence: 14 AA:

DE	Cryptic peptide of major cat allergen Fel d1.
XX	
KM	Major cat allergen Fel d1, chain 1; cryptic peptide; T cell antigen,
KM	atopic allergy; therapy.
OS	Felis sp.
XX	
PN	W09735194-A1.
XX	
PD	25-SEP-1997.
XX	
PE	20 MAR 1997; 97WO GB00783.
XX	
PR	24-APR-1996; 96GB-0008440.
XX	
PR	21-MAR-1996; 96GB-0005904.
XX	
PA	(UNLO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
XX	
P1	Kay AB, Larche M;
XX	
DR	WF1, 1997 483254/41.
XX	
PT	Determining if peptide of protein is cryptic peptide : by comparing
PT	its reactivity with pre-challenged and non-pre-challenged T cells,
PT	useful to diagnose or treat atopic condition, e.g. asthma
XX	
PS	Claim 12, base 31, 43pp, English.
XX	
CC	This sequence represents a cryptic peptide of the major cat allergen
CC	Fel d1. This sequence can be used in the method of the invention. The
CC	method of the invention is for determining if a peptide of a protein is a
CC	cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
CC	primary challenge, and measuring the reactivity of the T cells to the
CC	peptide, (b) exposing pre-challenged T cells, obtained by exposure to the
CC	protein, (b) exposing pre-challenged T cells, and measuring the
CC	reactivity of the pre-challenged T cells to the peptide and
CC	(c) determining the peptide to be a cryptic peptide if T cell reactivity
CC	is observed in the secondary, but not in the primary challenge. Peptides
CC	identified as being cryptic can be used to diagnose or treat an atopic
CC	allergy, e.g. asthma. They can also be used in to screen compounds for
CC	therapeutic activity, e.g. asthma therapeutics.
XX	
SN	Sequence 14 AA:
XX	
QU	Query Match BL 8% Score 63; DR 18; Length 14:
XX	
BT	Best Local Similarity 100.0%; Prod. No. 2,36-057
XX	
MA	Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0
XX	
OY	4 AAVKADVYLDA 16
DB	1 aypkaipvica 13
XX	
RE	Result 7
ID	AAM40977 standard; peptide; 14 AA.
XX	
AC	AAM40977;
XX	
DI	09-APR-1998 (first entry)
XX	
DE	cryptic peptide of major cat allergen fel d1.
XX	
KM	Major cat allergen Fel d1; chain 1; cryptic peptide; T cell antigen;
KM	atopic allergy; therapy.
XX	
OS	Felis sp.
XX	
PN	W09735193-A1.
XX	
PD	25-SEP-1997.
XX	

XX		PE	20-MAR-1997:	97WO-GH00783.	
XX		RE	24-APR-1996:	96GB-0008430.	
XX		RK	21-MAY-1996:	96GB-0005904.	
XX		ZA	(UNCL) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.		
XX		ZI	Kay AB, Latche M;		
XX		DN	MFI, 1997-4B0354/44.		
PT		PJ			
PT		PI	Determining if peptide of protein is cryptic peptide - by comparing its reactivity with pre-challenged and non-pre-challenged T cells,		
PT		ET	useful to diagnose or treat atopic condition, e.g., asthma		
XX		PS	Claim 12; Page 30; 4pp; English.		
CC		CC	This sequence represents a cryptic peptide of the major cat allergen Fel d ₁ . This sequence can be used in the method of the invention. The method of the invention is for determining if a peptide of a protein is a cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a primary challenge, and measuring the reactivity of the T-cells to the peptide; (b) exposing prechallenged T cells, obtained by exposure to the protein, to the peptide in a secondary challenge; and measuring the reactivity of the pre-challenged T-cells to the peptide; and (c) determining the peptide to be a cryptic peptide if T-cell reactivity is observed as being secondary, but not to the primary challenge. Peptides identified as being cryptic can be used to diagnose or treat an atopic allergy, e.g., asthma. They can also be used in to screen compounds for therapeutic activity, e.g., asthma therapeutically activeity.		
SQ		SQ	Sequence 14 AA:		
			Grocery Match	80.5%	Score 627 DB 18; Length 14:
			Isect Iacod Similarity	100.0%	Fold No. 4 de 0% 0%
			Metathes 13 Conservation	a2 Weightage	a2 Amblyg
OY		OY	1 EVLVAVYKAIPVVL 13 		CAPS D:
NL		NL	? cqvrrtprlptwrl 14		
RESULT	8				
ID	AAM40982				
XX		AA	AAM40982 standard; pepitide; 14 AA.		
AC	AAM40982;				
XX		XX			
XX	?? ATK 1978 ((1:1st end:??)				
DE		DE	cryptic peptide of major cat allergen Fel d ₁ .		
WW	Major cat allergen; fel d ₁ ; chain 1; cryptic peptides; 1 cell; asthma; atopic allergy? therapy?				
XX		OS	Felis sp.		
PN	W09735193-A1.				
PD		XX			
FD	25-SEP-1997.				
PP		XX			
FP	20-MAR-1997;	97WO-CB00783.			
PR		XX			
PR	24-APR-1996;	96GB-0008430.			
XX	21-MAR-1996;	96GB-0005904.			
PA	(UNCL) IMPERIAL COLLEGE SCI TECHNOLGY & MED.				
XI		XX			
XI	Kay AB, Latche M;				
OR		XX			
WP	1997-4B0354/44.				

performing it peptide of protein is cryptic peptide - by comparing
its reactivity with pre-challenged and non pre-challenged T-cells
used to diagnose or treat atopic condition, e.g. asthma

claim 22: Page 41: 49pp: English.

This sequence represents a cryptic peptide of the major cat allergen
Fel d1. This sequence can be used in the method of the invention. The
method of the invention is for determining if a peptide of a protein is a
primary peptide, and comprises: (a) exposing T-cells to the peptide in a
primary challenge, and measuring the reactivity of the T-cells to the
peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
peptide, to the peptide in a secondary challenge, and measuring the
reactivity of the pre-challenged T-cells to the peptide; and
(c) determining the peptide to be a cryptic peptide if T-cell reactivity
is observed in the secondary, but not in the primary challenge. Peptides
identified as being cryptic can be used to diagnose or treat an atopic
allergy, e.g. asthma. They can also be used in to screen compounds for
therapeutic activity, e.g. asthma therapeutics activity.

Sequence 14 AA:

Query Match: 76.6%; Score 59; ID 13; Length 14
Best Local Similarity 100.0%; Prot No 0.0013;
Matches 12; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

UY 5 QKALFVLENA 16
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ID 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RESULT:

AAW40975 standard: peptide: 14 AA:

XX AAW40975:

XX AAW40975:

XX 09-APR-1997 (first entry)

XX cryptic peptide of major cat allergen Fel d1

XX Major cat allergen Fel d1: chain 1: cryptic peptide 1-14; asthma;

XX atopic allergy: therapy.

XX Fc11s sp.

XX W076719 AL:

XX 25-SEP-1997.

XX 2 MAR-1997: 97W-380784.

XX 24-APR-1997: 96B-000847.

XX 21-MAR-1997: 96B-000504.

XX (UNCL) IMMEDIATE RELEASE SET 10-10-97 OF A MEMO.

XX Key Ab: Carole M.

XX WPI: 1997-48054/14.

XX [Formalised] if peptide of protein is cryptic peptide - by comparing
its reactivity with pre-challenged and non pre-challenged T-cells,
used to diagnose or treat atopic condition, e.g. asthma

claim 12: Page 40: 49pp: English.

This sequence represents a cryptic peptide of the major cat allergen
Fel d1. This sequence can be used in the method of the invention. The
method of the invention is for determining if a peptide of a protein is a
primary peptide, and comprises: (a) exposing T-cells to the peptide in a
primary challenge, and measuring the reactivity of the T-cells to the

peptide; (b) exposing pre-challenged
T-cells to the peptide in a secondary
challenge, and measuring the reactivity
of the T-cells to the peptide; and
(c) determining the peptide to be a
cryptic peptide if T-cell reactivity
is observed in the secondary, but not
in the primary challenge. Peptides
identified as being cryptic can be used
to diagnose or treat an atopic
allergy, e.g. asthma. They can also be
used to screen compounds for
therapeutic activity, e.g. asthma therapeutics activity.

Sequence 14 AA:

Query Match: 76.6%; Score 59; ID 13; Length 14
Best Local Similarity 100.0%; Prot No 0.0013;
Matches 12; Conservative 0; Mismatches 0;

UY 1 EQVAKYKALFV 16
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ID 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

RESULT: 10

AAW40975 standard: peptide: 14 AA:

XX AAW40975:

XX AAW40975:

XX 09-APR-1997 (first entry)

XX cryptic peptide of major cat allergen Fel d1

XX Major cat allergen Fel d1: chain 1: cryptic peptide 1-14; asthma;

XX atopic allergy: therapy.

XX Fc11s sp.

XX W076719 AL:

XX 25-SEP-1997.

XX 20-MAR-1997: 97W-380784.

XX 24-APR-1997: 96B-000847.

XX 21-MAR-1997: 96B-000504.

XX (UNCL) IMMEDIATE RELEASE SET 10-10-97 OF A MEMO.

XX Key Ab: Carole M.

XX WPI: 1997-48054/14.

XX [Formalised] if peptide of protein is cryptic peptide - by comparing
its reactivity with pre-challenged and non pre-challenged T-cells,
used to diagnose or treat atopic condition, e.g. asthma

claim 12: Page 40: 49pp: English.

This sequence represents a cryptic peptide of the major cat allergen
Fel d1. This sequence can be used in the method of the invention. The
method of the invention is for determining if a peptide of a protein is a
primary peptide, and comprises: (a) exposing T-cells to the peptide in a
primary challenge, and measuring the reactivity of the T-cells to the
peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
peptide, to the peptide in a secondary challenge, and measuring the
reactivity of the pre-challenged T-cells to the peptide; and
(c) determining the peptide to be a cryptic peptide if T-cell reactivity
is observed in the secondary, but not in the primary challenge. Peptides
identified as being cryptic can be used to diagnose or treat an atopic
allergy, e.g. asthma. They can also be used to screen compounds for
therapeutic activity, e.g. asthma therapeutics activity.

Sequence 14 AA:

Query Match 70.1%; Score 54; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0012;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EGVAVTRALPV 11
DB 4 EGVAVTRALPV 14

RESULT 11

AAW40983
ID AAW40983 standard; peptide: 14 AA.

AC AAW40983;

PD 09-APR-1998 (first entry)

DE Cryptic peptide of major cat allergen fel d1.

KW Major cat allergen; fel d1; chain 1; cryptic peptide; T-cell; asthma;
atopic allergy; therapy.

OS Felis sp.

PN W09735193-AL.

PD 25-SEP-1997.

PE 20-MAR-1997; 97W0-GH00783.

PR 24-APR-1996; 96GB-0008430.

PR 21-MAR-1996; 96GB-0005904.

PS (UNLO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.

PI Kay AB, Larche M;

DR WP1: 1997-480354/44.

Determining if peptide of protein is cryptic peptide - by comparing
its reactivity with pre-challenged and non pre-challenged T cells,
useful to diagnose or treat atopic condition, e.g. asthma

Claim 12; fig 1; 49pp; English.

This sequence represents a cryptic peptide of the major cat allergen
fel d1. This sequence can be used in the method of the invention. The
method of the invention is for determining if a peptide of a protein is a
cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
primary challenge, and measuring the reactivity of the T-cells to the
peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
protein, to the peptide in a secondary challenge, and measuring the
reactivity of the pre-challenged T-cells to the peptide; and
(c) determining the peptide to be a cryptic peptide if T-cell reactivity
is observed in the secondary, but not in the primary challenge. Peptides
identified as being cryptic can be used to diagnose or treat an atopic
allergy, e.g. asthma. They can also be used in to screen compounds for
therapeutic activity, e.g. asthma therapeutic activity.

Sequence 14 AA;

Query Match 70.1%; Score 54; DB 18; Length 14;
Best Local Similarity 100.0%; Pred. No. 0.0012;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 YKALPVLENA 16
DB 1 YKALPVLENA 11

RESULT 12

AAW40938
ID AAW40938 standard; peptide: 15 AA.

AC AAW40938;

PD 09-APR-1998 (first entry)

DE Cryptic peptide 5 of chain 1 of major cat allergen fel d1.

KW Major cat allergen; fel d1; chain 1; cryptic peptide; T-cell; asthma;
atopic allergy; therapy.

OS Felis sp.

PN W09735193-AL.

PD 25-SEP-1997.

PE 20-MAR-1997; 97W0-GH00783.

PR 24-APR-1996; 96GB-0008430.

PR 21-MAR-1996; 96GB-0005904.

PS (UNLO) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.

PI Kay AB, Larche M;

DR WP1: 1997-480354/44.

Determining if peptide of protein is cryptic peptide - by comparing
its reactivity with pre-challenged and non-pre-challenged T cells,
useful to diagnose or treat atopic condition, e.g. asthma

Claim 12; fig 1; 49pp; English.

This sequence represents a cryptic peptide of the chain 1 sequence of the
major cat allergen fel d1. This sequence can be used in the method of the
invention. The method of the invention is for determining if a peptide of
a protein is a cryptic peptide, and comprises: (a) exposing T-cells to
the peptide in a primary challenge, and measuring the reactivity of the
T-cells to the peptide; (b) exposing pre-challenged T-cells, obtained by
exposure to the protein, to the peptide in a secondary challenge, and
measuring the reactivity of the pre-challenged T-cells to the peptide;
and (c) determining the peptide to be a cryptic peptide if T-cell
reactivity is observed in the secondary, but not in the primary
challenge. Peptides identified as being cryptic can be used to diagnose
or treat an atopic allergy, e.g. asthma. They can also be used in to
screen compounds for therapeutic activity, e.g. asthma therapeutic
activity.

Sequence 15 AA;

Query Match 70.1%; Score 54; DB 18; Length 15;
Best Local Similarity 100.0%; Pred. No. 0.0014;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 6 YKALPVLENA 16
DB 1 YKALPVLENA 11

RESULT 13

AAW40974
ID AAW40974 standard; peptide: 14 AA.

AC AAW40974;

PD 09-APR-1998 (first entry)

DE Cryptic peptide of major cat allergen fel d1.

KW Major cat allergen; fel d1; chain 1; cryptic peptide; T-cell; asthma;

XX Claim 12; Page 28; 49pp; English.

ES
XX This sequence represents a cryptic peptide of the major cat allergen
XX
XX For d1. This sequence can be used in the method of the invention. The
XX method of the invention is for determining if a peptide of a protein is a
XX cryptic peptide, and comprises: (a) exposing T-cells to the peptide in a
XX primary challenge, and measuring the reactivity of the T-cells to the
XX peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
XX protein, to the peptide in a secondary challenge, and measuring the
XX reactivity of the pre-challenged T-cells to the peptide; and
XX (c) determining the peptide to be a cryptic peptide if T-cell reactivity
XX is observed in the secondary, but not in the primary challenge. Peptides
XX identified as being cryptic can be used to diagnose or treat an allergic
XX allergy, e.g. asthma. They can also be used in to screen compounds for
XX therapeutic activity, e.g. asthma therapeutic activity.

XX
XX Sequence 14 AA:

Query Match

55.8%; Score 43; DB 18; Length 14;

Best Local Similarity 100.0%; Pred. No. 0.16;

Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 EQVAQYKAL 9

|||||

DB 6 eqvaqykal 14

Search completed: July 17, 2002, 11:15:17
Job time: 237 sec

PS Claim 12: Page 24: 49pp: English.

XX This sequence represents a cryptic peptide of the major cat allergen
 CC Fel d1. This sequence can be used in the method of the invention. The
 CC method of the invention is for determining if a peptide of a protein is a
 CC cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
 CC primary, non-sensitized cell culture; (b) measuring the reactivity of the
 CC peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
 CC protein, to the peptide in a secondary challenge; and measuring the
 CC reactivity of the pre-challenged T cells to the peptide; and
 CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
 CC is observed in the secondary, but not in the primary challenge; peptides
 CC identified as being cryptic can be used to diagnose or treat an atopic
 CC allergy, e.g., asthma. They can also be used in to screen compounds for
 CC therapeutic activity, e.g., asthma therapeutic activity.

XX Sequence 17 AA:

Query Match: 100.0%, Score 89: E# 18: Length 17:

Best Local Similarity: 100.0%; Pred. No. 4.5e-08:

Matches: 17: Conservative: 0: Mismatches: 0: Indels: 0: Gaps: 0:

QY 1 LFLTGPDEYVEQVAVY 17
 1 LFLTGPDEYVEQVAVY 17

DB 1 LFLTGPDEYVEQVAVY 17

AAV25524 standard: peptide: 17 AA.

AAV25524:

30-SEP-1999 (first entry)

Human MHC Class II desensitizing peptide FQPII.

XX Major cat allergen Fel d1, chain 1, cryptic peptide: 17 cell; asthma;
 KW allergen grass, tree, weed, pollen, fungi, mold, food, insect, at home;
 KW chitinase; spider; milk; honey; fly; sheep; blow fly; honeydew;
 KW serum; fly; milk; honey; fly; sheep; blow fly; honeydew;
 KW cockroach; beetle; dog; horse; cow; pig; sheep; rabbit; rat; human; fly;
 KW milk; pollen; treatment; prevention; hypersensitivity;

XX Synthetic:

W09934426-A1.

15-JUL-1999.

11-JAN-1999: 99W0-G800080.

21-SEP-1999: 98CB-0020474.

09-JAN-1998: 96CB-0000445.

(1999) IMPERIAL COLLEGE INNOVATIONS LTD.

Kay AB, Larche M.

WPI, 1997 48954/44.

desensitizing patients to polypeptide allergens

claim 6: Figure 9: 117pp: English.

XX This invention describes a novel method of desensitizing a patient to a
 CC polypeptide allergen and comprises administering to the patient a peptide
 CC derived from the allergen where restriction to a MHC class II molecule
 CC possessed by the patient can be demonstrated for the peptide and the
 CC peptide is able to induce a late phase response in an individual who
 CC possesses the MHC class II molecule. The methods can be used for
 CC desensitizing patients to allergens present in e.g., grass, tree and weed

CC (including ragweed) pollens, fungi and moulds, foods, stinging insects,
 CC the chironomidae (non-biting midges), spiders and mites, housefly, fruit
 CC fly, sheep blow fly, green worm fly, grain weevil, silkworm, honeybee;
 CC non biting midge larvae, bee, earth larvae, scabworm, cockroach, larvae of
 CC scabrite mite, rat, guinea pig, mice or rabbit. They can also be used to
 CC produce major cat allergen Fel d1, chain 1, cryptic peptide. This sequence
 CC represents a peptide used to desensitize the human major
 CC histocompatibility complex (MHC) class II response to the Fel d1 chain 1
 CC allergen.

XX Sequence 17 AA:

Query Match: 100.0%, Score 89: E# 20: Length 17:

Best Local Similarity: 100.0%; Pred. No. 4.5e-08:

Matches: 17: Conservative: 0: Mismatches: 0: Indels: 0: Gaps: 0:

QY 1 LFLTGPDEYVEQVAVY 17
 1 LFLTGPDEYVEQVAVY 17

DB 1 LFLTGPDEYVEQVAVY 17

AAV40970 standard: peptide: 14 AA.

AAV40970:

09-APR-1998 (first entry)

Cryptic peptide of major cat allergen Fel d1.

Major cat allergen Fel d1, chain 1, cryptic peptide: 17 cell; asthma;
 KW atopic allergy; therapy.

XX Fells sp.

W09934426-A1.

25-SEP-1997.

20-MAR-1997: 97W0-G800783.

24-APR-1996: 96CB-0008430.

21-MAR-1996: 96CB-0005904.

(1999) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.

Kay AB, Larche M.

WPI, 1997 48954/44.

determining if peptide of protein is cryptic peptide: by comparing
 CC the reactivity with pre-challenged and non pre-challenged T cells,
 CC used to diagnose or treat atopic condition, e.g., asthma

claim 12: Page 24: 49pp: English.

XX This sequence represents a cryptic peptide of the major cat allergen
 CC Fel d1. This sequence can be used in the method of the invention. The
 CC method of the invention is for determining if a peptide of a protein is a
 CC cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
 CC primary challenge; and measuring the reactivity of the T cells to the
 CC peptide; (b) exposing pre-challenged T cells, obtained by exposure to the
 CC protein, to the peptide in a secondary challenge; and measuring the
 CC reactivity of the pre-challenged T cells to the peptide; and
 CC (c) determining the peptide to be a cryptic peptide if T cell reactivity
 CC is observed in the secondary, but not in the primary challenge; peptides
 CC identified as being cryptic can be used to diagnose or treat an atopic
 CC allergy, e.g., asthma. They can also be used in to screen compounds for
 CC therapeutic activity, e.g., asthma therapeutic activity.


```

XX  Cat: allergy: human T cell reactive feline protein: HERP1
XX  Immunotherapy:
XX
XX  Felis sp.
XX
XX  036120769 A.
XX
XX  19-SEP-2000.
XX
XX  29 APR 1995. 9508-0431184.
XX
XX  02-SEP-1994. 9408-0300928.
XX  03-NOV-1989. 8908-0431565.
XX  26-Feb-1993. 9308-0662276.
XX  13-DEC-1991. 9108-0807529.
XX  25-MAR-1992. 9208-0857411.
XX  15-MAY-1992. 9208-0884718.
XX  15-JAN-1993. 9408-0006116.
XX
XX  (IMM-) IMMUNOGENIC PHARM CORP.
XX
XX  Gatter ML, Garman KD, Greenstein JL, Bond JF.
XX  WF1: 2000-601477/57.
XX
XX  Detecting, preventing and treating sensitivity to cat protein allergen
XX  comprises combining a biological sample with a human T cell reactive
XX  feline protein and determining the extent of binding that occurs.
XX
XX  Example 4: Column 14, 16pp. English.
XX
XX  The present invention relates to the detection of sensitivity to a cat
XX  protein allergen by combining a blood sample from a subject with a
XX  peptide of human T cell reactive feline protein (HERP). This method
XX  and the HERP peptides are useful for diagnosing, preventing and
XX  treating cat allergies by reduction or abrogating an individual's
XX  allergic response to a cat allergen. DNA sequences encoding the HERP may be
XX  used as probes to locate equivalent sequences present in other species.
XX  These may further be used to study the mechanism of immunotherapy of
XX  cat allergy and to design modified derivatives, including an
XX  functional equivalent useful in immunotherapy. The present
XX  sequence was used in the invention.
XX
XX  Sequence 17 AA:
XX
XX  Query Match 82.0%; Score 74; DB 21; Length 17;
XX  Best Local Similarity 100.0%; Prot. No. 26 05;
XX  Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX  QY 1 LFLGHPDEYVEGV 14
XX  DB 4 LFLGHPDEYVEGV 17
XX
XX  RESULT 7
XX  AAY87701
XX  ID AAY87701 standard; Peptide: 17 AA.
XX
XX  AAY87701:
XX
XX  22 AUG-2000 (first entry)
XX
XX  Feline human TRP peptide Pol 2.
XX
XX  Cat: allergy: human T cell reactive feline protein: cat allergen:
XX  immunotherapy: T cell stimulatory; diagnostic; immunotherapy.
XX
XX  Felis sp.
XX
XX  05604890-A.
XX
XX

```

```

XX  11-APR-2000.
XX
XX  27-APR-1995. 9508-0430014.
XX
XX  02-SEP-1994. 9408-0300928.
XX  03-NOV-1989. 8908-0431565.
XX  26-FEB-1993. 9108-0662276.
XX  13-DEC-1991. 9108-0807529.
XX  25-MAR-1992. 9208-0857411.
XX  15-MAY-1992. 9208-0884718.
XX  15-JAN-1993. 9408-0006116.
XX
XX  (IMM-) IMMUNOGENIC PHARM CORP.
XX
XX  F. M. Weples Bio. Gatter ML, Greenstein JL, Bond JF.
XX  Greenstein JL, Griffith JL, Garman KD;
XX
XX  WF1: 2000-416065/27.
XX
XX  Now human T cell reactive feline protein useful for reducing or
XX  detecting individual's allergic response to cat allergen comprising
XX  two different equivalently linked peptide chains.
XX
XX  Example 4: Column 10+104; 10pp. English.
XX
XX  This invention describes a novel naturally occurring cat protein allergen
XX  (1): human T cell reactive feline protein (HERP), comprising two
XX  different equivalently linked peptide chains with a molecular weight of 20
XX  kD or 130 kD under non-reducing conditions and 10 kD or 100 kD
XX  under reducing conditions. The products of the invention have
XX  anti-allergic activity and act as human T cell stimulators. HERP is useful
XX  for reducing or preventing the adverse effects of cat allergens on cat
XX  allergic individuals and in in vivo diagnostic tests to determine which
XX  feline allergens sensitively react to a subject's cat allergy. This provides
XX  a cat sensitive independent purified TRP is also useful for studying
XX  the mechanism of immunotherapy of cat allergy and to design modified
XX  derivatives, including an functional equivalent. That are more useful in
XX  immunotherapy against cat allergy. DNA sequences encoding TRP are
XX  useful as probes to locate equivalent sequences present in other species
XX  (goats, sheep, dogs, rabbits or horses) that may be useful in diagnostics
XX  and/or therapeutics. Fully defined and characterized TRP provides
XX  complete and a very simple desensitization therapy. This sequence
XX  represents a human T cell reactive feline protein (also known as Fel d 1)
XX  derived peptide pol 2 which is described in the method of the invention.
XX
XX  Sequence 17 AA:
XX
XX  Query Match 82.0%; Score 74; DB 21; Length 17;
XX  Best Local Similarity 100.0%; Prot. No. 26 05;
XX  Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX  QY 1 LFLGHPDEYVEGV 14
XX  DB 4 LFLGHPDEYVEGV 17
XX
XX  RESULT 8
XX  AAY90115
XX  ID AAY90115 standard; Peptide: 17 AA.
XX
XX  AAY90115:
XX
XX  13-JUN-2000 (first entry)
XX
XX  Cat TRP chain 1 derived peptide, peptide Pol 2.
XX
XX  Cat: allergy: human T cell reactive feline protein: cat protein allergen:
XX  house dust, Fel d 1, cat allergy, Felis domesticus sensitization; therapy;
XX  diagnosis; goat; sheep; horse; rabbit; dog.
XX
XX  Felis domesticus.
XX
XX

```


XX determining if peptide of protein is cryptic peptide - by comparing
 PT its reactivity with pre-challenged and non-pre-challenged T cells,
 PT useful to diagnose or treat atopic condition, e.g., asthma
 PS
 PS Claim 12: Page 27: 49pp: English.
 XX
 XX This sequence represents a cryptic peptide of the major cat allergen
 CC Fel d1. This sequence can be used in the method of the invention. The
 CC method of the invention is for determining if a peptide of a protein is a
 CC cryptic peptide, and comprises: (a) exposing T cells to the peptide in a
 CC primary challenge; and measuring the reactivity of the T-cells to the
 CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
 CC protein, to the peptide in a secondary challenge; and measuring the
 CC reactivity of the pre-challenged T-cells to the peptide; and
 CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
 CC is observed in the secondary, but not in the primary challenge. Peptides
 CC identified as being cryptic can be used to diagnose or treat an atopic
 CC allergy, e.g., asthma. They can also be used in to screen compounds for
 CC therapeutic activity, e.g., asthma therapeutic activity.
 CC
 CC Sequence 14 AA:

Query Match: 89.9%; Score 72; DB 18; Length 14;
 Best Local Similarity 100.0%; Pred. No. 2.4e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 LITGDEYVEYVAVQ 16
 1111111111111111
 TB 1 litgdeyveyvayq 14

RESULT 11

AAW40971
 ID AAW40971 standard; peptide: 14 AA.

AC AAW40971;
 XX

DI 09-APR-1998 (first entry)
 XX

DE cryptic peptide of major cat allergen Fel d1.
 XX

KM Major cat allergen; Fel d1; chain 1; cryptic peptide; T-cell; asthma;
 KM atopic allergy; therapy.
 XX

OS Felis sp.
 XX

IN W09735193-A1.
 XX

PD 25-SEP-1997.
 XX

PF 20-MAR-1997; 97WO-GH00783.
 XX

PR 24-APR-1996; 96GB-0008430.
 XX

PR 21-MAR-1996; 96GB-0005904.
 XX

PS (UNCL) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
 XX

PI Kay AB, Larche M;
 XX

DR WF1: 1997-480354/44.
 XX

PT determining if peptide of protein is cryptic peptide - by comparing
 PT its reactivity with pre-challenged and non-pre-challenged T cells,
 PT useful to diagnose or treat atopic condition, e.g., asthma
 XX

PS Claim 12: Page 28: 49pp: English.
 XX

CC This sequence represents a cryptic peptide of the major cat allergen
 CC Fel d1. This sequence can be used in the method of the invention. The
 CC method of the invention is for determining if a peptide of a protein is a
 CC cryptic peptide, and comprises: (a) exposing T cells to the peptide in a

CC primary challenge; and measuring the reactivity of the T-cells to the
 CC peptide; (b) exposing pre-challenged T-cells, obtained by exposure to the
 CC protein, to the peptide in a secondary challenge; and measuring the
 CC reactivity of the pre-challenged T-cells to the peptide; and
 CC (c) determining the peptide to be a cryptic peptide if T-cell reactivity
 CC is observed in the secondary, but not in the primary challenge. Peptides
 CC identified as being cryptic can be used to diagnose or treat an atopic
 CC allergy, e.g., asthma. They can also be used in to screen compounds for
 CC therapeutic activity, e.g., asthma therapeutic activity.
 CC
 CC Sequence 14 AA:

Query Match: 78.7%; Score 70; DB 18; Length 14;
 Best Local Similarity 100.0%; Pred. No. 5.2e-05;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 5 GTPDEYVEYVAVQ 17
 1111111111111111
 TB 1 gtpdeyveyvayq 13

RESULT 12

AAW40936
 ID AAW40936 standard; peptide: 16 AA.

AC AAW40936;
 XX

DI 09-APR-1998 (first entry)
 XX

DE cryptic peptide 8 of chain 1 of major cat allergen Fel d1.
 XX

KM Major cat allergen; Fel d1; chain 1; cryptic peptide; T-cell; asthma;
 KM atopic allergy; therapy.
 XX

OS Felis sp.
 XX

IN W09735193-A1.
 XX

PD 25-SEP-1997.
 XX

PF 20-MAR-1997; 97WO-GH00783.
 XX

PR 24-APR-1996; 96GB-0008430.
 XX

PR 21-MAR-1996; 96GB-0005904.
 XX

PS (UNCL) IMPERIAL COLLEGE SCI TECHNOLOGY & MED.
 XX

PI Kay AB, Larche M;
 XX

DR WF1: 1997-480354/44.
 XX

PT determining if peptide of protein is cryptic peptide - by comparing
 PT its reactivity with pre-challenged and non-pre-challenged T cells,
 PT useful to diagnose or treat atopic condition, e.g., asthma
 XX

PS Claim 12: Fig 1: 49pp: English.
 XX

CC This sequence represents a cryptic peptide of the chain 1 sequence of the
 CC major cat allergen Fel d1. This sequence can be used in the method of the
 CC invention. The method of the invention is for determining if a peptide of
 CC a protein is a cryptic peptide, and comprises: (a) exposing T cells to
 CC the peptide in a primary challenge; and measuring the reactivity of the
 CC T-cells to the peptide; (b) exposing pre-challenged T cells, obtained by
 CC exposure to the protein, to the peptide in a secondary challenge; and
 CC measuring the reactivity of the pre-challenged T cells to the peptide;
 CC and (c) determining the peptide to be a cryptic peptide if T-cell
 CC reactivity is observed in the secondary, but not in the primary
 CC challenge. Peptides identified as being cryptic can be used to diagnose
 CC or treat an atopic allergy, e.g., asthma. They can also be used in to
 CC screen compounds for therapeutic activity, e.g., asthma therapeutic
 CC activity.
 CC

